

ASOS PROGRAM MANAGEMENT COMMITTEE

RECORD APMC 01-3 (FINAL)

August 23, 2001

1. CONVENED - 9:00 AM

A meeting of the ASOS Program Management Committee (APMC) was convened by Chair Douglas Hess on August 23, 2001, in Room 4246, Silver Spring Metro Center Building 2 (SSMC-2), National Weather Service Headquarters, Silver Spring, MD.

Members participating:

Chair	- Douglas Hess
DOC	- Rainer Dombrowsky
	- Paul Nipko
DOD	- Col. Nathan Feldman, USAF
	- LCDR Thomas Millman, USN
DOT	- Ray Weimer, Jr. (for Deborah Johnson)
	- David Whatley
ASOS PI	- Richard Ahlberg, Jr.
Ex. Sec.	- Robert Gillespie, Sr.

Advisors and/or Guests included: J. Facundo, D. Gifford, P. Hoch, L. Kozlosky, D. Mannarano, T. Ross and A. Wissman from the DOC; E. Heusinger Jr., J. Humphrey and T. Kimbrell from the DOD; and P. Armbruster, G. Dillon, J. Ford, D. King, J. Kranz, J. Pritchard, W. Quist, F. Sherertz and G. Strickler from the DOT.

2. OPENING REMARKS

Mr. Hess recognized: LCDR Tom Millman, USN, CNO(N962C2), as the recently joined Department of the Navy PMC member; the assignment of Deborah Johnson, FAA/AOP-1, to replace Richard Thoma, FAA/AOP-2, as a primary PMC Members for the DOT - Richard Thoma will serve as her alternate; and Frances Sherertz, FAA/ARS-21, the recently assigned DOT PMC Alternate for David Whatley, FAA/ARS-20.

Mr. Hess offered the ASOS PMC Meeting Minutes, version "Final 7/13/01", for comment and approval. The minutes were approved without comment.

3. DOD STATUS OF AUTOMATED SURFACE WEATHER OBSERVING SYSTEMS
(Agenda Item 6)

Mr. Tim Kimbrell, Space and Naval Warfare (SPAWAR) Systems Center Charleston, SC, was introduced to present the Navy ASOS program. Mr. Kimbrell stated SPAWAR is the Navy's engineering agent for ASOS. It supports 74 systems installed from 1993 to 2000, at both Navy and Marine Corps sites. The systems currently in operation include those procured under the DOC ASOS contract, as well as single cabinet units the Navy procured directly from SMI using the ASOS specifications. The Navy has undertaken ASOS Preplanned Product Improvements (P3I) to extend the service life of the equipment. The majority of the Continental United States (CONUS) systems are deployed along the east and west coasts in high humidity and salinity environments. ASOS Outside Continental United States (OCONUS) sites include Hawaii, Cuba, Puerto Rico, Japan, Greenland, Iceland, Spain, Italy, Greece and the British Indian Ocean Territory [Diego Garcia].

All Navy ASOS systems are class II systems, with redundant power supplies and processors. The basic software load is the NWS Version 2.4 load, which has been enhanced to display density altitude on the ASOS Video Display Units (VDUs), and to allow the operator to select meters or miles as the units for visibility. Eight site (both CONUS and OCONUS) have the Met Discontinuity sensor group; three of those eight have the 3 sensor groups originally intended for an areal algorithm that was never implemented. One site at Cherry Point, NC, has two complete ASOS systems. At 12 ASOS locations, the Navy has integrated unique hardware components including: Ultrasonic Wind Sensor (mfg: Handar), Cloud Height Ceilometer (mfg: Handar), and aspirated Temperature/Dewpoint Sensor - hygrometer (mfg: Rotronics). These components are not currently part of the NWS-managed ASOS baseline. The Navy systems are incompatible with the NWS ASOS Operations and Monitoring Center (AOMC) as a result of the hardware modifications.

The software used at these 12 sites is Navy version 5.08, which is comprised of the NWS/USAF Version 2.56 with some enhancements. For example, the software enables the operator to configure the system making a choice for each of the following options: the Technical Services Laboratory, Inc. model 1088 or aspirated Rotronic hygrometer; the Belfort or Handar wind sensor; and Vaisala or Handar ceilometer.

Current plans for product improvements include the replacement of the Temperature/Dew Point Sensor, the Lightning Detection Sensor and the Freezing Rain Sensor. These particular sensors were identified due to their higher failure rates, which are attributed to the higher humidity

and salinity experienced in the coastal environments. The Navy determined it would be more cost effective to replace these sensors than to increasing the frequency of preventative maintenance on the sensors.

The Navy is also in the process of evaluating the Gill ultrasonic wind sensor at a limited number of sites. SMI has been contracted to develop the necessary ASOS software modification and hardware mounting kit to proceed with the sensor installation and evaluation.

In response to questions regarding the rationale for the Navy seeking sensor improvement solution independent of the ASOS Product Improvement activities, Mr. Ed Huesinger pointed out the Navy has taken a different tack in addressing ASOS sensor shortcomings. Where the NWS decided to retain the existing ASOS ambient temperature sensor, and add a hygrothermometer (measures both ambient temperature and dew point) but use only the dew point measurement from the hygrothermometer; the Navy decided to replace the temperature sensor with a hygrothermometer and use both the temperature and dew point measurements from that single instrument. The Navy made this decision to simplify ASOS maintenance by eliminating the burden of the second sensor.

In light of the various test activities being independently conducted by the agencies, the NWS, Air Force, Navy, and FAA agreed to make past and future ASOS-candidate sensor test results available to each other to maximize the use of the information collected and avoid repetitive test activities in the future.

Mr. Kimbrell stated the Navy would like to participate more in line with the NWS in developing and implementing ASOS hardware and software product improvements and related systems modifications. The Navy will generate Requests for Change (RCs) to incorporate their unique sensors into the NWS ASOS baseline as qualified parts. The Navy will also seek to merge their existing software into the NWS ASOS software baseline through the RC process. In coming in line with the NWS ASOS baseline, the Navy expressed its requirement to retain the flexibility to implement equipment options designed to meet their unique requirements.

Given their intention to converge to a unified baseline, the Navy was asked if they intended to use the AOMC for support. Mr. Ed Heusinger responded the Navy had not addressed that aspect yet, but said it would be taken into consideration.

Mr. Jim Humphrey, USAF, stated the difficulty for overseas sites was in dialing back to the stateside AOMC. The USAF has established AOMC-like entities - one in Europe and one in the Pacific - to take care of USAF overseas ASOSs. With few exceptions, all USAF ASOS sites in CONUS, Alaska and

Hawaii, dial in to the AOMC in Silver Spring, MD. The exceptions are 10 USAF ASOSs configured with a ceilometer and a power supply which are not part of the ASOS baseline. RCs are being developed by the Air Force to add these items to the baseline, after which all of the stateside systems will be fully supported by the AOMC.

LCDR Millman, USN, was introduced to address ASOS policy and operations. He stated in the Navy and Marine Corps, ASOS observations are validated by observers before they are transmitted to pilots. At 13 outlying DOD airfields, however, staffing is provided only during duty hours. During off-duty hours, the Navy has implemented a policy that allows the unvalidated ASOS transmissions at those airfields to be received as the official weather observation. This allows remote air traffic controllers (ATCs) to use this information directly and relay the information to pilots as current weather.

When asked if those ASOSs were being centrally monitored to assure proper operation of the sensors with the ability to shut off sensors that are not operating correctly, Lcdr Millman responded the Navy does not currently have that capability. The Navy is in the process of drafting an implementation instruction identifying procedures to certify these 13 ASOSs -- attesting to the accuracy of the observations they provided over a specified period in time. Once certified, ATCs would be authorized to use the ASOS information without weather observer intervention, and relay the information to the pilots as current weather. ATCs will be trained to recognize error messages on ASOS, and will notify the local equipment technician of any problems requiring attention.

Mr. Facundo, NWS, stated the Navy may be putting controllers at risk because there are instances when the reported conditions are not representative of the actual conditions at the site. The NWS is able to overcome these types of discrepancies by using the AOMC and Weather Forecasting Offices (WFOs) as a quality control element for ASOS reports. Col. Feldman, USAF, indicated the Air Force has a policy of maintaining weather personnel on station to augment the ASOS observations while the control tower is operational. When the control tower shuts down, ASOS is switched to broadcasting automated observations which are identified as such in the Ground-To-Air (GTA) radio transmissions. Mr. Heusinger noted the original Navy requirements did not include GTA radios as a systems requirement. It was envisioned that all Navy ASOS observations would be augmented by human observers. Consequently, the Navy has only one site with a GTA radio installed, and it was installed in response to U.S. Coast Guard requirements.

LCDR Millman identified the Navy's efforts to respond to the ATC community's request for the measurement and reporting of touchdown winds at the various touchdown points on the airfield. The Navy has contracted the development of these wind sensors. The sensors will not be a part of, or integrated into ASOS; they will exist as a stand alone system. The information will be displayed with the ASOS information on DOD ATC equipment.

LCDR Millman stated ASOS was the Navy's primary automated surface weather observing system for flight operations. Mr. Heusinger indicated a very limited number of automated systems [other than ASOS] had been fabricated for specific applications such as reporting weather conditions (temperature, pressure, winds and humidity) at ports and at a USAF radio and television station. On these systems, communications is achieved over land lines to download current data as well as data archived in the data logger. An effort to communicate via cell phones was tested but never successfully implemented.

At the request of the Chair, Col. Feldman presented a brief update of the Air Force's progress in acquiring the OA21 automated surface observing system. The contract was awarded and is being protested. Resolution is expected in the mid-November 2001 time frame.

4. ASOS CCB REPORT (Agenda Item 3)

Mr. Ahlberg distributed the ASOS Change Request Status Report dated August 22, 2001, summarizing the status of the RCs processed by the ASOS Configuration Control Board (CCB) since the last APMC on May 8, 2001. The August 22, 2001, report updates the information provided in an earlier report distributed on August 6, 2001, via e-mail. When asked, the APMC had no specific questions, comments, or remarks regarding the information contained in the report.

5. NWS PROGRAM STATUS BRIEFING (Agenda Item 4)

In opening remarks, Mr. Ahlberg stated the first slide reflected the NWS and FAA priorities incorporating the FAA's decision to raising the Processor Upgrade to priority 1. When asked about the NWS requirement for a Sunshine Sensor (NWS priority 8) Mr. Ahlberg replied that the current sensor requirement was for minutes of sunshine based on radiation exceeding a specific threshold. The existing sensor is currently employed at approximately 140 sites but is very difficult to maintain. The sensor which was being developed as a replacement would have also provided the intensity of the radiation, but sensor development was suspended due to fiscal constraints and the overriding priorities of other

efforts. There are a number of agencies interested in using solar data, but the original system requirement is traceable back to the Department of Agriculture.

ACU Processor Upgrade. The development and integration of the ACU Processor Upgrade completed the system-level test during May thru July 2001, generating 45 trouble reports (TRs). All but one TR has been solved - the remaining TR is associated with bus contentions causing the Operator Interface Device to lock-up. Resolution is expected the week of August 21, 2001. System tests will be re-run in late August through September, 2001. Operation acceptance tests at 31 sites will be undertaken in three phases running from late September to early November 2001, with the Deployment decision scheduled for mid November 2001. A limited production contract for 75 boards to support the Operational Acceptance Test (OAT) was awarded early in July; a procurement request is pending to buy 650 boards to initiate FAA site upgrades and complete the NWS upgrades. In FY02 another 362 boards will be placed on contract to complete the procurement for the FAA. Purchases made include spares. No purchases to date have been made on behalf of the USAF or USN. Mr. Humphrey, USAF, indicated funding requests for Air Force upgrades were being staffed. Mr. Ahlberg reminded Mr. Kimbrell, USN, the Navy still had \$385K of production funds available with the program office. Mr Kimbrell stated he is awaiting an internal Navy response on the commitment of those funds.

Mr. Ahlberg commented the benefits of dual processors are still under investigation. The purchase of the first 75 boards will allow for the installation of dual processors at a limited number of site - the specific sites have not yet been chosen.

Dew Point Sensor Replacement. The Dew Point Sensor Replacement problems identified in early spring have been corrected. The sensor has completed and passed all the environmental qualification tests. A 6 month evaluation at Duck, NC, will be conducted to test the sensor for calibration variance induced as a result of continuous exposure to the salt environment. The Dew Point Sensor Replacement software interface is undergoing integration testing the week of August 21, 2001. Assuming successful results, a short system test should be concluded the week of August 28, 2001. If successful, it will be followed by limited production of 22 units to support OAT scheduled late October through December 2001, with an early production release in January 2002, and sensor installation commencing in April 2002. The 20 sites selected for OAT will be a subset of the 30 ACU Processor Upgrade sites.

Ice Free Wind Sensor. Some minor setbacks were experienced when it was discovered that the cage design proposed by

Vaisala to keep birds from perching above the center of the sensor, induced some turbulence and cross talk between the sensors. Subsequently, the cage on the Model 425 sensor (125 knot wind) was replaced with a heated bird spike in the center. The model 427 will retain the birdcage and has undergone some firmware modifications to increase the signal to noise ratio to mitigate the effects of the crosstalk. Both designs are undergoing wind tunnel testing at Sterling, VA. Another noted design modification is a change of the sensor color from red to more neutral shades to reduce the attraction of birds. The consequence of these redesign activities is the delay of the Design Qualification Testing (DQT) and OAT. This will not impact the timing of production. Prioritization of this effort among the other ASOS product improvement projects restrains funding for full scale production until the 1st quarter, FY2004.

All Weather Precipitation Accumulation Gauge (AWPAG). The AWPAG competition originally saw three vendors participating: Geonor, Belfort, and Lynch. Following winter testing, the results were sent to all three vendors along with a note stating they did not fully meet the requirements, and requesting a proposal to address their respective deficiencies. After evaluating the development proposal, Geonor was dismissed for not being in the competitive range. After face-to-face meetings with Belfort and Lynch, and evaluation of their best and final offers, the program office completed a down-select. Legal is currently reviewing the proposed contract. Contract award is expected in early September 2001. This contract award is to accomplish the Development and System Integration portion of the contract. The successful vendor will produce 10 compliant sensor prototype.

Ceilometer Replacement. Two Qualimetrics ceilometers are being purchased for continuing the concept exploration phase for the Ceilometer Replacement.

Budget. FAA is in the process of transferring \$450K, to advance the purchase of 100 ACU Processors from FY2002 to FY2001.

6. ASOS SOFTWARE WORKING GROUP ACTIVITIES (Agenda Item 5)

Mr. Rainer Dombrowsky, Chair of the ASOS Working Group (ASWG), provided a briefing on the group's activities. Since the last APMC, the ASWG Charter has been finalized and provided to the APMC Secretariat. It now includes an APMC signature page which is to be completed following the charter's review and approval by the APMC.

Interim Loads. The next interim ASOS software load to be delivered is 2.63, which has resolved many of the immediate emergency issues, to include the 'line held high' problems and the 'one minute thunderstorm' problem. As that load is being deployed, the ASWG will begin the process of developing a future interim load to address the Weather Sensor Processor interface.

Two commissioned sites are currently operating on test load 2.61A. The ASWG is requesting the APMC consider retaining 2.61A for continued operations at these two sites as the next level of deployment is achieved.

A pre-cursor to software load 3.0, 2.62I contains the ice accretion algorithm. It will be deployed to 20 sites in October 2001, for operational testing during the winter months.

Next Load. Software load 2.78 will incorporate all of the aforementioned development efforts. It will be re-designated load 2.80, and installed in January 2003 on systems with the ACU Processor upgrade.

When asked, Mr. Dombrowsky confirmed the integration of the Navy's software requirements (presented earlier in the meeting) will necessitate either a delay in the release of software load 2.80, or the assignment of the Navy requirements to a post-2.80 software release. When asked for the implementation date of the freezing drizzle algorithm discussed at the last APMC, Mr. Dombrowsky indicated it would be in a software release beyond the 2.80 load. While statements at the previous APMC suggested the possibility of fielding the freezing drizzle algorithm as early as January 2002, these were, at best, based on very aggressive schedules. Mr. Ahlberg reminded the committee that the freezing drizzle algorithm Request for Change (RC) had not yet cleared the ASOS CCB, and would not proceed until an official response from the FAA was received. Mr. Hess indicated an FAA response dated August 22, 2001, was received on August 23, 2001, and contained the FAA request for the addition of the automated freezing drizzle detection algorithm. Mr. Kozlosky, ASOS CCB Secretariat, noted the lack of a freezing drizzle algorithm RC to introduce the change into the software baseline. Mr. Ahlberg responded the NWS will draft and submit the RC for incorporating the freezing drizzle algorithm into the software baseline. Mr. Dombrowsky noted he will include a report on the progress of the freezing drizzle algorithm at the next APMC meeting.

7. ASOS INTERNET CONNECTIVITY

Mr. Al Wissman, NWS, provided an information brief on the requirements, milestones, and potential issues associated with interfacing ASOS to the internet for near real time collection and dissemination of surface weather data. This information was presented for preliminary consideration pending the formal submission and review of the NWS-generated requirements document.

There exists a growing need to expand the collection and dissemination capabilities of high resolution data. Multiple activities including academia and Government contractors, are requesting the use of ASOS one minute data for research projects and ASOS algorithm development. Presently these activities dial into ASOS to capture the data. Other relevant sources of weather data, including the Co-operative (COOP) observer data, is being collected via telephone and mail, reducing both the timeliness and accessibility of this information. Finally, NWS Weather Forecast Offices (WFOs) are collecting other surface weather data that is not generally accessible outside the local community.

Key problem areas in addressing data timeliness, availability and accessibility include: NCDC's inability to collect ASOS data from all ASOS sites; communication and translation delays inherent with the existing COOP mail and telephone services for collecting and disseminating the weather data; the inevitable contentions between various users attempting to directly accessing ASOS systems simultaneously through dial-up modems; and the inadequate distribution of other surface data collected for local WFO use.

The proposed technical solution is the establishment of a central data repository for collecting and disseminating all ASOS 1 minute data, COOP data and other surface data, via the internet. The future implementation of the ASOS ACU Processor Upgrade and software enhancements will provide ASOS with the capability to communicate via the internet. The COOP modernization is presently focused on connecting COOP sites to the internet to make their data available in near real time. Other WFO surface data collected locally by the WFOs could be provided to a central data repository over the internet as well. A scalable weather data dissemination solution would provide authorized Government and non-Government users access to this central data repository.

Accomplishments to date include the ASOS processor re-host effort awarded in September 2000, and a design development contract for the web data repository and dissemination services released in September 2001 - with results expected

before the middle of October 2001. A decision to proceed with a phased approach to develop and implement the web repository and dissemination services will follow the receipt of the design proposal. The associated effort to modify the ASOS software to communicate via the internet is expected to be awarded by the end of August 2001, with a working scalable prototype delivered in the March 2002 time frame. The goal for establishing a working Data Repository and limited dissemination web site is April 2002.

The benefits to be realized include: easy retrieval of surface weather data in near real time for all authorized users; no limits on the number of simultaneous data users; private and secure interface for both Government and commercial users; cost effectiveness for both the Government and the private sector; availability of a composite service for all surface weather data; and assurance of meeting the data and security requirements of a broad user base through early design collaboration with all sectors.

Mr. Wissman indicated potential issues will need to be addressed before implementing this capability. Government policy issues include: restrictions on Government distribution of weather data to include infringement on private sector market areas, and charging user fees to defray operational and maintenance costs. Within the scope of weather derivative issues, a good deal of scrutiny will need to be imposed on regulating changes to the system and impacting system performance. Finally, security will need to be carefully considered to assure all requirements are adequately addressed.

Mr. Whatley stated the FAA had recently identified concerns for the storage and dissemination of surface weather data, and supported this approach as a viable solution. Mr. Nipko asked if the use of the internet would violate the NWS restrictions on using the internet for "operational" services. Mr. Facundo responded the "operational" collection of weather data will continue as it presently exists - the Web collection and dissemination service will be a separate, distinct activity. When asked about the cost savings arising from the web implementation, Mr. Wissman indicated the savings would come from reduced telecommunication costs associated with the National Climatic Data Center (NCDC) and the WFOs not needing to dial into remote ASOS systems to obtain data. Mr. Facundo stated Internet Service Provider (ISP) fees would come into play as an added expense. However, the cost of curtailing modem expansions which would otherwise be required to handle the increasing number of users, will result in further cost savings. Mr. Nipko stated although this system is not being employed operationally, the composition and significance of the user base and their projects will not take well to disruptions in the availability of the data. Consequently,

adequate redundancy in server architecture and internet access will need to be assured. Mr. Wissman assured the APMC the architecture will be redundant.

8. ASOS OPERATIONS

Mr. Wissman presented the status of ASOS monthly operations and maintenance for the three month period of May, June, and July 2001. System availability for All Airport Observations; NWS Regional; ASOS Airport Service Level A, B, and C; and Non-Augmented Airports Observation was presented.

Of note on the All Airport Observations, Central Region, and Airport Service Levels A, B & C charts, is the failure of the altimeter to achieve the goal of 99.9% availability in May and June 2001. This is due to flooding at the St. Paul (STP), MN, site. The airport was shut down for almost 90 days. The system did return to service in July 2001. The altimeter availability goal would have been achieved had this one site not been included in the data.

Altimeter availability on the Southern Region chart was below 99.9% as a result of a succession of incidents at the Dalhart (DHT), TX, site causing an outage in excess of 2 weeks. The incidents included a cut power cable which was followed by a blown transformer. The raw percentage for that site was approximately 72%.

Mr. Wissman briefed the following statistics:

- Mean Time Between Failure, by sensor
- Mean Time Sensor Recovery, by sensor
- Monthly Average Number of Trouble Tickets Per Site, recorded over the past 13 months
- Trouble Ticket Summary, July 2001
- ASOS Maintenance Restoration, three month period, as a percent of the requirements met by NWS region
- Maintenance Restoration Times Not Met, three month period, by month and NWS region
- Data Availability, Percentage of Missed Observations By Agency, thirteen month period
- Non-Augmented Sites, Observations (METAR) Not Available, three month period, as a percentage by month and NWS region
- Service Level A, B, and C Sites, Observations (METAR) Not Available, three month period, as a percentage by month and NWS region

Mr. Wissman noted the ASOS Mean Time Between Failure (MTBF) specification requirement of 2190 hours is not being met. Also of note is the absence of the Pacific region Pressure Sensor bar; its absence indicates the performance exceeded

the 2500 hour max ordinate value and, consequently, did not display.

There was some discussion among APMC members regarding the consequence of including a single prolonged sensor failure in the averages, and its ability to significantly skew the results. Mr. Wissman explained a failure at a service level D site for more than a minute causes a "\$" to be appended to the observation. Consequently, when the observation is broadcast over GTA radio, the specific instrument is reported missing. Should the instrument return to full service before the top of the hour, it will be logged during that hour as an outage. Col. Feldman, USAF, suggested the information be tailored to report mean time between critical failure. Mr. Wissman responded by displaying a chart (not included with the standard APMC briefing package) depicting critical sensor failures.

On The ASOS Mean Time Sensor Recovery, the spike for the pressure sensor in Central region is attributed to St. Paul, MN, as previously discussed. Mr. Ahlberg asked why the system totals for any given region appeared as a lesser value than each of the constituent elements that contribute to that system total. Mr. Wissman noted the discrepancy and will investigate its source and solution.

The ASOS Maintenance Restoration goal of 95% was met by all except the Pacific Region. In the Pacific Region there are only eight sites and generally more extended distances to travel to restore the equipment.

Approximately 5800 ASOS trouble tickets were received during the month of July 2001, resulting in an average of 6.33 Trouble Tickets per site, per month.

On the ASOS Data Availability - Missed Observation By Agency chart (reflecting performance of the long line communications networks), the FAA ADAS network continues to show improvement as evidenced by the downward trend of missed observations.

9. ASOS CCB MEMBERSHIP AND FAA PRODUCT IMPROVEMENT FUNDING (Agenda Item 10)

Mr. David Whatley, FAA, proposed the FAA participation on the ASOS CCB be increased from three to four members. This change is proposed in response to the FAA internal realignment, to allow voting membership to reflect the following offices: retention of ARU400, ARS200, and AUA430; and the addition of AOP. The FAA would also proposed the NWS and DOD be afforded an opportunity to extend their membership proportionately.

The APMC approved the increase in the number of DOT ASOS CCB voting members to four. The DOD is satisfied with the participation of a single voting member from each of their respective services (USN and USAF). The DOC declined to increase their number of voting members which stands at 3 members.

Mr. Whatley indicated on August 1, 2001, the FAA Joint Resources Counsel met and approved a re-baselining of the weather sensors program for the period 2002 through 2009. \$6.3 M have been approved for ASOS product improvements. Mr. Whatley stated although the availability of this money remains dependent on the actual appropriations from year to year, the level of importance being placed on product improvements by the FAA is noteworthy.

10. **APMC CHARTER** (Agenda Item 9)

The Chair noted the approval of the APMC Charter, dated July 23, 2001. Changes to the list of individuals occupying membership positions will be published in a forthcoming update to Appendix B.

11. **OLD BUSINESS**

APMC 01-1.4: The Secretariat will notify the Chair and Secretariat of the ASOS CCB and ASOS Software Working Group of this development and request the Charters for each be (re)written for review and approval by the ASOS PMC.

STATUS: NEW 2/13/01

3/27/01: Mr. Gillespie notified Mr. Tim Ross (ASWG) and Mr. Lewis Kozlosky (ACCB) by e-mail, of the need to submit charters for approval by the APMC. Mr. Gillespie is awaiting finalization of the APMC membership in order to publish the signature page for incorporation into their charters.

5/8/01: Work in progress.

8/23/01: The APMC membership signature page was distributed for inclusion with the charters. Recent changes to the membership dictate the need to update the signature page. The Secretariat will generate the updated signature page for inclusion in the charters, and distribute the charters for review and signature (following the process used for the APMC Charter sign-off).

APMC 01-2.1 The Navy will provide an informational brief at the next APMC (8/7/2001) describing the current systems and technologies, and development of future surface hydro-meteorological observing systems in the Department of the Navy. Information will include a description of the

ASOS hardware and software configuration(s) employed by the Navy.

STATUS: NEW 5/8/01; CLOSED 8/23/01

8/23/01: Mr. Kimbrell and LCDR Millman, USN, provided a briefing on the status of Department of the Navy automated surface weather observing systems, to include acquisition, operations and policy.

APMC 01-2.2 The FAA (Mr. Whatley) will provide a message to the ASOS PMC Chair, Mr. Hess, prior to the next APMC meeting, conveying the FAA's endorsement and support for the implementation of the Freezing Drizzle Algorithm in ASOS.

STATUS: NEW 5/8/01; CLOSED 8/23/01

8/23/01: Mr. Whatley provided the FAA correspondence dated August 22, 2001, listing the automated Freezing Drizzle (FZDZ) detection, measuring, and reporting algorithm as the FAA's #1 priority of needs.

12. NEXT MEETING

The Secretariat proposed date for the next APMC meeting on November 27, 2001, was not approved by the APMC.

Col. Feldman, asked the APMC to considered semi-annual meetings, given the stability of the program. After some discussion, the APMC agreed to reducing the number of meetings to 3 per year and to convene the next meeting in the first half of January 2002. A proposed date will be circulated via email by the APMC Secretariat.

13. EXECUTIVE SESSION

The Chair offered members the opportunity to convene an Executive Session. The committee members unanimously declined.

14. ADJOURN - The APMC adjourned at approximately 12:30 p.m.